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AUG 1 3 1999 OF COUNSEL LEONARD H. MARKS OPPICE OF THE SECRETARY

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August 13, 1999

DOCKET FILE COPY ORIGINAL

#### VIA HAND DELIVERY

Ms. Magalie R. Salas Secretary Federal Communications Commission The Portals II 445 – 12<sup>th</sup> Street, S.W. Room TW-A325 Washington, D.C. 20554

Dear Ms. Salas

On behalf of Louisiana Television Broadcasting Corp., licensee of television station WBRZ, Baton Rouge, Louisiana, there are herewith transmitted an original and four copies of a Petition for Rulemaking proposing the substitution of DTV Channel 13 for DTV Channel 42, Baton Rouge, Louisiana.

Yours very truly

Robert B. Jacobi

RBJ:btc

**Enclosures** 

Clay Pendarvis, Esq. cc:

Ms. Pam Blumenthal

No. of Copies rec'd\_\_( List ABCDE

#### **BEFORE THE**

# Federal Communications Commission

In the Matter of	<b>)</b>	
in the Watter of		AUG 13 1999
Amendment of Section 73.622(b),	RM-	FEDERAL DOWN.
Digital Television Table of Allotments,		FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY
(Baton Rouge, Louisiana)	1	OPPICE OF THE SECRETARY

To: Chief, Mass Media Bureau

#### PETITION FOR RULEMAKING

Louisiana Television Broadcasting Corp., licensee of Television Broadcast Station WBRZ, Baton Rouge, Louisiana ("Petitioner"), through its attorneys and pursuant to Sections 1.419, 1.420 and 73.623 of the Commission's Rules, hereby requests that the Table of Allotments for Digital Television ("DTV") Stations, Section 73.622(b) of the Commission's Rules, be amended as follows:

<u>City</u>	<u>Channel</u> Present	No. Proposed
Baton Rouge, Louisiana	42	13

In support of such request, the following is set forth.

1. Petitioner seeks to substitute DTV Channel 13 in lieu of DTV Channel 42 at Baton Rouge, Louisiana for use by Station WBRZ at the same transmitter site authorized for use by WBRZ for its NTSC operation on Channel 2; DTV Channel 42 was

allocated for use by WBRZ pursuant to a <u>Sixth Report and Order</u> in MM Docket No. 87-268, 12 F.C.C. Rcd. 14588 (1997), <u>recon. granted in part</u>, 13 F.C.C. Rcd. 7418 (1998).

- 2. As set forth in the attached engineering of Jerome J. Manarchuck (du Treil, Lundin & Rackley), the proposed DTV channel substitution is fully consistent with the requirements of Section 73.623(c) and 76.625(a) of the Rules. Specifically, the substitution of DTV Channel 13 at Baton Rouge, Louisiana would comply with the principal community coverage requirements and will not result in more than a two percent (2%) increase in new interference to the population served by any other DTV station, DTV allotment or analog television broadcast station or result in any affected station receiving interference in excess of ten percent (10%) of its population.
- 3. The proposed substitution would benefit the public interest for the following reasons. If the Petition for Rulemaking is adopted, Petitioner intends to operate DTV Channel 13 during the transition period with facilities which will provide service to a population of 1,391,267 within a land area of 25,226 square kilometers. However, absent a change in DTV allocation from Channel 42 to Channel 13, Petitioner will not, during the interim DTV transition period, engage in full power DTV operations, but, rather, will operate at low power, providing interim DTV coverage to its city of license. As set forth in the attached engineering exhibit, an interim DTV operation on Channel 42 would provide DTV service to a population of 396,909 within a land area of 2,487 square kilometers; thus, the proposed substitution of Channel 13 would result in

The engineering submitted in support of this rulemaking request consists of a complete Section III of the most recent FCC 301 application form.

interim DTV service to almost an additional million persons in an area more than ten times the size of the area served by a Channel 42 DTV allocation.

- 4. The proposed change also will enable Station WBRZ to avoid the extra cost of purchasing a UHF transmitter and other equipment which it will not use at the end of the DTV transition period. As is reflected in the attached engineering exhibit, Petitioner proposes to operate on DTV Channel 13 after the transition period and, therefore, will be able to use the antenna, transmission line and transmitter employed during the transition period. Moreover, there would be substantially higher operating costs for electrical power usage with a UHF Channel 42 DTV operation which would not be incurred for DTV operation on Channel 13. If Petitioner's proposal to substitute Channel 13 in lieu of Channel 42 is adopted by the Commission, the resulting capital and operating cost savings will make available additional resources for Petitioner to invest in promoting and providing DTV programming to the public.
- 5. The success of a DTV station operation is inherently related to viewer acceptance; the larger the audience size, the greater likelihood that viewers will purchase DTV receivers and, further, purchase receivers at an earlier point in time. The compelling public interest benefit herein is that an approximate one million additional persons will be served by a DTV Channel 13 operation at the commencement of DTV operation in 2002 many years prior to the end of the transition period. Moreover,

At the end of the transition period, the Channel 13 antenna will be relocated, thus enabling the station to operate with maximized facilities providing service to a population of 1,748,686 within a land area of 33,844 square kilometers.

viewer identification of a DTV Channel 13 operation will be augmented by the fact that

both Petitioner's analog and DTV operations will be in the VHF band. Accordingly, a

Channel 13 DTV allocation would better serve to expedite the public's acceptance and

conversion to digital television.

6. The proposed substitution of DTV Channel 13 for DTV Channel 42 would

permit station WBRZ to replicate a substantially larger portion of its existing service area

during the DTV transition period; the proposed channel change complies with the

coverage and allocation criteria set forth in the Commission Rules. Accordingly, and for

the reasons stated herein, Petitioner submits that its proposed DTV channel substitution

would serve the public interest and the Commission is respectfully requested to issue a

Notice of Proposed Rulemaking.

Respectfully submitted

LOUISIANA TELEVISION BROADCASTING

CORP.

Robert B. Jacobi

COHN AND MARKS

1920 N Street, N.W.

Suite 300

Washington, D.C. 20036-1622

Its Attorneys

Date: August 13, 1999

#### SECTION III PREPARER'S CERTIFICATION

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name Jerome J. Manarchuck	Relationship to Applicant (e.g., Cartering Technical Consu	<del>_</del> :			
Signature Ume Manarchuek	Date August 4, 199	9			
Mailing Address	, Inc., 201 Fletcher Ave	nue			
City Sarasota	State or Country (if foreign address)  ZIP Code 342				
Telephone Number (include area code) 941-329-6000	E-Mail Address (if available) jerry@DLR.com				

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

#### SECTION III-D - DTV Engineering

Complete Questions 1-5 of the Certification Checklist and provide all data and information for the proposed facility, as requested in Technical Specifications, Items 1-13.

Certification Checklist: A correct answer of "Yes" to all of the questions below will ensure an expeditious grant of a construction permit. However, if the proposed facility is located within the Canadian or Mexican borders, coordination of the proposal under the appropriate treaties may be required prior to grant of the application. An answer of "No" will require additional evaluation of the applicable information in this form before a construction permit can be granted.

1.	The p	roposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:			
	(a)	It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622.		Yes	X No
	(b)	It will operate from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622.	X	Yes	□ No
	(c)	It will operate with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622.		Yes	X No
2.	the ge	roposed facility will not have a significant environmental impact, including exposure of workers or eneral public to levels of RF radiation exceeding the applicable health and safety guidelines, and fore will not come within 47 C.F.R. Section 1.1307.	X	Yes	□ No
	Appli	cant must submit the Exhibit called for in Item 13.			
3.		ant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will pass the allotted principal community.	X	Yes	□ No
4.		equirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, receiving installations and FCC monitoring stations have either been satisfied or are not table.	x	Yes	□ No
5.	requir propo registr	ntenna structure to be used by this facility has been registered by the Commission and will not e reregistration to support the proposed antenna, OR the FAA has previously determined that the sed structure will not adversely effect safety in air navigation and this structure qualifies for later ration under the Commission's phased registration plan, OR the proposed installation on this ture does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7.	X	Yes	□ No

#### SECTION III-D DTV Engineering

#### TECHNICAL SPECIFICATIONS

Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

#### **TECH BOX**

1.	Chanr	nel Number: DTV 13 Analog TV, if any 2
2.	Zone:	
3.	Anten	ana Location Coordinates: (NAD 27)
		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
4.	Ante	enna Structure Registration Number: 1019300
		Not applicable FAA Notification Filed with FAA
5.	Anto	enna Location Site Elevation Above Mean Sea Level:  6.4 meters
6.	Ove	rall Tower Height Above Ground Level: 529.4 meters
7.	Heig	ght of Radiation Center Above Ground Level:  512.6 meters
8.	Heiş	ght of Radiation Center Above Average Terrain:
9.	Max	imum Effective Radiated Power (average power):
10.	Anto	enna Specifications:
	a.	Manufacturer Dielectric Model THP-SP3-2-1
	b.	Electrical Beam Tilt: See Textdegrees Not Applicable
	c.	Mechanical Beam Tilt: degrees toward azimuth degrees True X Not Applicable
		Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c).  Exhibit No.  Fig. 1
	d.	Polorization: X Horizontal Circular Elliptical

#### **TECH BOX**

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0	.295	60	.993	120	.295	180	.993	240	.295	300	.993
10	.270	70	.936	130	.270	190	.936	250	.270	310	.936
20	.456	80	.798	140	.456	200	.798	260	.456	320	.798
30	.682	90	.644	150	.682	210	.644	270	.682	330	.644
40	.852	100	.424	160	.852	220	.424	280	.852	340	.424
50	.972	110	.259	170	.972	230	.259	290	.972	350	.259
Additional Azimuths							.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
			is propose bit require	ed, the requed.	uirements o	of 47 C.F.	R. Section	73.625(c)		Exhibi Fig.	

11.	Does the proposed facility satisfy the interference protection provisions of 47 C.F.R. Section 73.623(a)? (Applicable only if Certification Checklist Items 1(a), (b), or (c) are answered "No.")	X Yes
	If "No " attach as an Exhibit justification therefor, including a summary of any related	Exhibit N

12. If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefor. (Applicable only if Certification N/A

# 13. Environmental Protection Act. Submit in an Exhibit the following:

previously granted waivers.

Checklist Item 3 is answered "No.")

Exhibit No. **Tech.** 

a. If Certification Checklist Item 3 is answered "Yes," a brief explanation of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.

By checking "Yes" to Cettification Checklist Item 3, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.

If Certification Checklist Item 3 is answered "No," an Environmental Assessment as required by 47 C.F.R. Section 1.1311.

#### TECHNICAL EXHIBIT APPLICATION FOR DTV CONSTRUCTION PERMIT STATION WBRZ-DT BATON ROUGE, LOUISIANA

August 4, 1999

CH 13 30 KW (MAX-DA) 515 M

# TECHNICAL EXHIBIT APPLICATION FOR DTV CONSTRUCTION PERMIT STATION WBRZ-DT BATON ROUGE, LOUISIANA CH 13 30 KW (MAX-DA) 515 M

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Figure 3	Allocation Study

TECHNICAL EXHIBIT

APPLICATION FOR DTV CONSTRUCTION PERMIT

STATION WBRZ-DT

BATON ROUGE, LOUISIANA

CH 13 30 KW (MAX-DA) 515 M

#### Technical Narrative

This Technical Exhibit prepared to support an application for television station WBRZ(TV) Baton Rouge, Louisiana, actually supports a petition for rule making. The Exhibit provides information needed to evaluate the allotment of a different DTV channel for WBRZ. Station WBRZ currently operates on Channel 2 and has been assigned DTV channel 42.

The Federal Communications Commission assigned channel 42 as WBRZ's DTV allotment in the Memorandum, Opinion and Order (MO&O) concerning reconsideration of the 6<sup>th</sup> Report and Order in MM Docket No. 87-268. For DTV channel 42, an ERP of 1000 kilowatts with antenna height above average terrain (HAAT) of 515 meters was specified.

Station WBRZ-DT proposes to operate on DTV channel 13, rather than DTV channel 42, for the following reasons. First, if WBRZ-DT is required to operate on its allotted UHF DTV channel, for a number of reasons, it would construct only a minimal non-directional UHF facility complying with the FCC's city coverage requirement.

During the early transition period, WBRZ-DT expects to operate the channel 13 DTV facility at a lower

Consulting Engineers

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Baton Rouge, Louisiana

antenna height. It is necessary to mount the antenna at this lower height in order to minimize the loading on the tower. WBRZ-DT would operate with a maximum directional ERP of 30 kilowatts and an HAAT of 340 meters. This proposed facility would provide interference free noise limited coverage to a land area of 25,226 square kilometers in which 1,391,267 persons reside. However, at some time during the transition period, WBRZ-DT would operate at an HAAT of 515 meters, as described herein. In comparison, the above mentioned minimal UHF facility would provide coverage to approximate 2,487 square kilometers encompassing 396,909 persons. Thus, the proposed channel 13 facility (30 kW/340 m) would provide coverage to an additional 994,358 persons.

Following the transition period, WBRZ-DT proposes to operate with maximized facilities which would provide FCC predicted interference free noise limited coverage to an area of 33,844 square kilometers encompassing 1,748,686 persons.

Figure 2 is a map showing the 36 dBu noise-limited contour for the proposed channel 13 facility. As can be seen, the proposed 36 dBu contour would encompass the entire principal community of Baton Rouge. Therefore, the proposed operation would comply with Section 73.625(a) of the FCC's rules concerning principal community coverage.

Secondly, the use of channel 13 would make it easier for current WBRZ(TV) viewers to locate the DTV operation, as normal viewing is on the VHF band.

 $<sup>^{\</sup>mbox{\scriptsize 1}}$   $\,$  This will require removal of the existing top mounted channel 2 antenna.

\_Consulting Engineers
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Baton Rouge, Louisiana

Finally, the use of a VHF channel would allow for a substantially less transmitter power and smaller antenna to serve approximately the same coverage area as a comparable UHF DTV facility. This would reduce the applicants initial capital investment as well as overhead costs. Thus, the additional resources would be available for investment in DTV programming.

For the above reasons, the FCC is respectfully requested a change in the DTV allotment from channel 42 to channel 13.

Station WBRZ proposes to operate DTV channel 13 at its allotted DTV site (30-17-49 N, 91-11-40 W). It is proposed to operate with a maximum directional DTV ERP of 30 kW utilizing a Dielectric custom made THP-SP3-2-1 directional antenna. It is noted that the proposed antenna has a variable vertical elevation pattern. Figure 1 shows the horizontal and variable vertical radiation patterns for the proposed DTV antenna system. The antenna HAAT for the channel 13 DTV operation will be 515 meters, which is the current licensed WBRZ HAAT.

The proposed WBRZ DTV facilities (30 kW, 515 m) comply with Section 73.622(f)(6) of the FCC's rules concerning maximum allowable ERP and antenna height for DTV stations.

A site map is not being submitted since this information is already on file for the WBRZ analog operation. The FCC antenna registration number for the existing structure is 1019300.

Baton Rouge, Louisiana

There are no known AM broadcast stations within 5 kilometers (3 miles) of the WBRZ-DT transmitter site. The following is a list of known authorized full service FM and TV stations within 16 kilometers (10 miles) of the proposed DTV site.

Station	Channel	Bearing(°True)	Distance(km)
WLSS, Baton Rouge, LA	273C	0	0.0
WDGL, Baton Rouge, LA	251C	346.9	7.9
WRKF, Baton Rouge, LA	207C1	353.5	8.5
WXCT, Baton Rouge, LA	264C	292.5	8.6
WYNK-FM, Baton Rouge, LA	268C	292.5	8.6
KLSU, Baton Rouge, LA	216A	7.6	12.7
WJFM, Baton Rouge, LA	203C2	45.7	14.0
WAFB, Baton Rouge, LA	9	346.9	7.9
WLPB-TV, Baton Rouge, LA	27	353.5	8.5
WGMB, Baton Rouge, LA	44	292.6	8.6
WVLA, Baton Rouge, LA	33	292.6	8.6

Although no adverse electromagnetic impact is expected, the applicant recognizes its responsibility to correct problems that result from its proposed DTV operation.

The WBRZ transmitter site is approximately 1476 kilometers from the closest point of the Canadian border. The site is more than 757 kilometers from the closest point of the Mexican border. The closest FCC monitoring station is at Kingsville, Texas, approximately 724 kilometers to the west-southwest. The closest point of the National Radio Quiet Zone (VA/WV) is more than 1,269 kilometers to the northeast. The closest point of the Table Mountain Radio Quiet Zone (CO) is approximately 1675 kilometers to the northwest. The closest radio astronomy site operating on TV channel 37 is at Fort Davis, Texas, approximately 1222 kilometers to the west. These separations are sufficient to not be a concern for coordination purposes.

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Baton Rouge, Louisiana

Figure 2 is a map showing the DTV predicted coverage contour. The map provides the predicted 36 dBu f(50,90) noise limited contour. The extent of the contour has been calculated using the normal FCC prediction method. The Baton Rouge city limits were derived from information contained in the 1990 U.S. Census. The population within the predicted 36 dBu contour is based on 1990 Census information. The U.S. land area within the predicted 36 dBu contour is based on the use of a computer algorithm. Figure 2 also shows the predicted 41 dBu f(50,90) noise limited contour for a hypothetical minimal UHF facility operating on channel 42.

Figure 3 is the separation study for DTV channel 13 at the WBRZ site. The study has been used to determine those assignments requiring interference studies using the procedures outlined in the FCC's OET-69 bulletin.<sup>2</sup> Interference calculations for the proposed WBRZ DTV operation are summarized below.

			Prop. DTV
Station	Channel	FCC Service Population	Interference Population
WYES-TV, New Orleans,	LA NTSC-12	1,549,355	2,778 (0.2%)
WLOX-TV, Biloxi, MS	NTSC-13	1,100,061	77,577 (7.7%)
KLTM-TV, Monroe, LA	NTSC-13	692,103	22,486 (3.4%)
KLTM-TV (CP)	NTSC-13	708,211	27,065 (3.9%)

From the above, it appears that the proposed WBRZ DTV operation on channel 13 exceeds the FCC's 2%/10%

The duTreil, Lundin & Rackley, Inc. DTV interference analysis program is based on the program and procedures outlined by the FCC in the Sixth Report and Order; subsequent Memorandum Opinion and Order; and FCC OET Bulletin No. 69. A nominal grid size resolution of 2 km was employed. An Alpha based processor computer system was employed. The results have been found to be in very close agreement with the results of the FCC implementation of OET Bulletin No. 69.

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Baton Rouge, Louisiana

interference standards with respect to stations WLOX-TV and KLTM-TV. However, interference calculations to these stations were made from all pertinent surrounding analog and DTV assignments. It was found that with respect to station WLOX-TV all the proposed WBRZ-DT interference is masked by interference from other analog assignments except for a population of 2,848 people, which is new or unique interference. This interference population (2,848 people) represents 0.3% of the WLOX-TV analog service population (1,100,061). Likewise, interference calculations were made with respect to the licensed and authorized construction permit (CP) facilities of station KLTM-TV. It was found that with respect to the KLTM-TV CP facility the proposed WBRZ-DT facility would cause unique interference to 13,407 people (1.9% of the service population (708,211)), and with regard to the licensed KLTM-TV facility, the proposed would cause unique interference to 10,651 persons, (1.5% of the service population (692,103)). Hence, the proposed WBRZ-DT operation complies with the FCC's 2%/10% interference policy.

The proposed WBRZ DTV facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the WBRZ DTV antenna is located 513 meters above ground level. The maximum DTV ERP is 30 kW. A relative field value of 0.25 is presumed for the antenna's downward radiation (see Figure 1). The calculated power density at a point 2 meters (6.6 feet) above ground level is 0.0002 mW/cm². This is 0.1% of the FCC's recommended limit of 0.2 mW/cm² for channel 13 for an "uncontrolled" environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. As

# du Treil, Lundin & Rackley, Inc.

\_Consulting Engineers Page 7

Baton Rouge, Louisiana

this is a multi-user site, an agreement will control access to the site. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down. The proposed WBRZ DTV operation appears to be otherwise categorically excluded from environmental processing.

Jewme J. Manauhuu, Jerome J. Manarchuck

du Treil, Lundin & Rackley, Inc. 201 Fletcher Avenue Sarasota, Florida 34237

August 4, 1999



Figure 1 Sheet 1 of 11

Channel

13

Date

Call Letters WBRZ-DT

Baton Rouge, LA

Location Customer

Antenna Type.

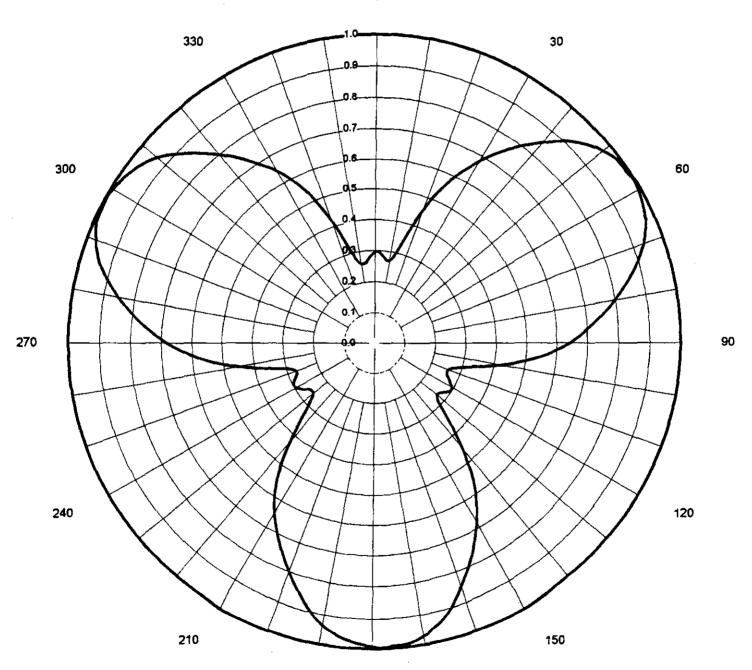
THP-SP3-2-1

#### **AZIMUTH PATTERN**

Gain 2.10 Calculated / Measured

( 3.22 dB) Calculated Frequency Drawing # 213.00 MHz THP-SP3-13

0





Date

Call Letters

Antenna Type

WBRZ-DT

THP-SP3-2-1

Channel

13

Location Customer

Baton Rouge, LA

**TABULATION OF AZIMUTH PATTERN** 

Azimuth Pattern Drawing #: THP-SP3-13

Angle	Field														
0	0.295	45	0.924	90	0.644	135	0.329	180	0.993	225	0.309	270	0.682	315	0.871
1	0.296	46	0.936	91	0.627	136	0.350	181	0.990	226	0.294	271	0.700	316	0.858
2	0.296	47	0.946	92	0.608	137	0.375	182	0.986	227	0.281	272	0.719	317	0.843
3	0.294	48	0.955	93	0.589	138	0.401	183	0.983	228	0.271	273	0.737	318	0.828
4	0.290	49	0.965	94	0.568	139	0.428	184	0.979	229	0.264	274	0.754	319	0.813
5	0.285	50	0.972	95	0.547	140	0.456	185	0.974	230	0.259	275	0.771	320	0.798
6	0.280	51	0.979	96	0.524	141	0.483	186	0.968	231	0.257	276	0.787	321	0.783
7	0.275	52	0.985	97	0.499	142	0.509	187	0.962	232	0.258	277	0.804	322	0.768
8	0.271	53	0.990	98	0.475	143	0.534	188	0.954	233	0.260	278	0.820	323	0.753
9	0.269	54	0.992	99	0.449	144	0.559	189	0.945	234	0.263	279	0.836	324	0.737
10	0.270	55	0.993	100	0.424	145	0.582	190	0.936	235	0.269	280	0.852	325	0.722
11	0.274	56	0.993	101	0.399	146	0.603	191	0.924	236	0.275	281	0.867	326	0.707
12	0.282	57	0.995	102	0.373	147	0.623	192	0.912	237	0.281	282	0.882	327	0.691
13	0.293	58	0.997	103	0.350	148	0.642	193	0.899	238	0.286	283	0.897	328	0.676
14	0.309	59	0.996	104	0.329	149	0.662	194	0.885	239	0.291	284	0.911	329	0.661
15	0.329	60	0.993	105	0.309	150	0.682	195	0.871	240	0.295	285	0.924	330	0.644
16	0.350	61	0.990	106	0.294	151	0.700	196	0.858	241	0.296	286	0.936	331	0.627
17	0.375	62	0.986	107	0.281	152	0.719	197	0.843	242	0.296	287	0.946	332	0.608
18	0.401	63	0.983	108	0.271	153	0.737	198	0.828	243	0.294	288	0.955	333	0.589
19	0.428	64	0.979	109	0.264	154	0.754	199	0.813	244	0.290	289	0.965	334	0.568
20	0.456	65	0.974	110	0.259	155	0.771	200	0.798	245	0.285	290	0.972	335	0.547
21	0.483	66	0.968	111	0.257	156	0.787	201	0.783	246	0.280	291	0.979	336	0.524
22	0.509	67	0.962	112	0.258	157	0.804	202	0.768	247	0.275	292	0.985	337	0.499
23	0.534	68	0.954	113	0.260	158	0.820	203	0.753	248	0.271	293	0.990	338	0.475
24	0.559	69	0.945	114	0.263	159	0.836	204	0.737	249	0.269	294	0.992	339	0.449
25	0.582	70	0.936	115	0.269	160	0.852	205	0.722	250	0.270	295	0.993	340	0.424
26	0.603	71	0.924	116	0.275	161	0.867	206	0.707	251	0.274	296	0.993	341	0.399
27	0.623	72	0.912	117	0.281	162	0.882	207	0.691	252	0.282	297	0.995	342	0.373
28	0.642	73	0.899	118	0.286	163	0.897	208	0.676	253	0.293	298	0.997	343	0.350
29	0.662	74	0.885	119	0.291	164	0.911	209	0.661	254	0.309	299	0.996	344	0.329
30	0.682	75	0.871	120	0.295	165	0.924	210	0.644	255	0.329	300	0.993	345	0.309
31	0.700	76	0.858	121	0.296	166	0.936	211	0.627	256	0.350	301	0.990	346	0.294
32	0.719	77	0.843	122	0.296	167	0.946	212	0.608	257	0.375	302	0.986	347	0.281
33	0.737	78	0.828	123	0.294	168	0.955	213	0.589	258	0.401	303	0.983	348	0.271
34	0.754	79	0.813	124	0.290	169	0.965	214	0.568	259	0.428	304	0.979	349	0.264
35	0.771	80	0.798	125	0.285	170	0.972	215	0.547	260	0.456	305	0.974	350	0.259
36	0.787	81	0.783	126	0.280	171	0.979	216	0.524	261	0.483	306	0.968	351	0.257
37	0.804	82	0.768	127	0.275	172	0.985	217	0.499	262	0.509	307	0.962	352	0.258
38	0.820	83	0.753	128	0.271	173	0.990	218	0.475	263	0.534	308	0.954	353	0.260
39	0.836	84	0.737	129	0.269	174	0.992	219	0.449	264	0.559	309	0.945	354	0.263
40	0.852	85	0.722	130	0.270	175	0.993	220	0.424	265	0.582	310	0.936	355	0.269
41	0.867	86	0.707	131	0.274	176	0.993	221	0.399	266	0.603	311	0.924	356	0.275
42	0.882	87	0.691	132	0.282	177	0.995	222	0.373	267	0.623	312	0.912	357	0.281
43	0.897	88	0.676	133	0.293	178	0.997	223	0.350	268	0.642	313	0.899	358	0.286
44	0.911	89	0.661	134	0.309	179	0.996	224	0.329	269	0.662	314	0.885	359	0.291



Date

Call Letters

Location

WBRZ-DT Ch Baton Rouge, LA

Figure 1
Sheet 3 of 11
Channel 13

Customer

Antenna Type

THP-SP3-2-1

# ELEVATION PATTERN: 0, 60,120,180,240 & 300° Azimuths

RMS Gain at Main Lobe RMS Gain at Horizontal

Degrees Below Horizontal

2.10 2.10 (3.22 dB)

Beam Tilt Frequency 0.00 deg

Frequency 213.00 MHz Drawing # 02H021000





Degrees Below Horizontal

Date

Call Letters

Location

WBRZ-DT

Sheet 4 of 11 Channel 13

Figure 1

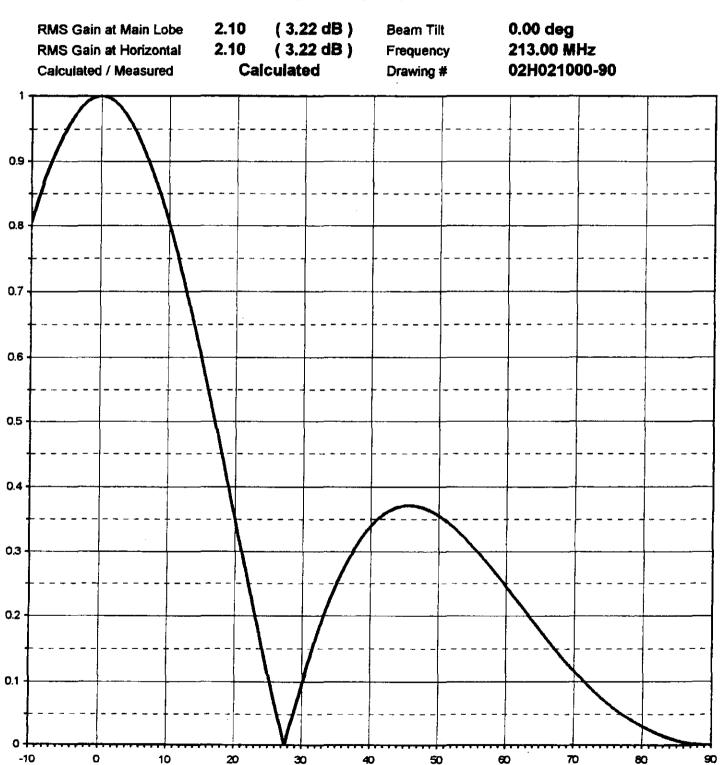
Baton Rouge, LA

Customer

Antenna Type

THP-SP3-2-1

# **ELEVATION PATTERN: 0, 60,120,180,240 & 300° Azimuths**





Date

Call Letters

WBRZ-DT Channel

nel 13

Location

Customer Antenna Type Baton Rouge, LA

THP-SP3-2-1

# **TABULATION OF ELEVATION PATTERN**

Elevation Pattern Drawing #: 02H021000-90

Angle	Field										
-10.0	0.805	2.4	0.988	10.6	0.787	30.5	0.112	51.0	0.349	71.5	0.100
-9.5	0.823	2.6	0.986	10.8	0.779	31.0	0.129	51.5	0.345	72.0	0.095
-9.0	0.841	2.8	0.984	11.0	0.771	31.5	0,146	52.0	0.340	72.5	0.090
-8.5	0.857	3.0	0.981	11.5	0.752	32.0	0.162	52.5	0.336	73.0	0.085
-8.0	0.873	3.2	0.979	12.0	0.731	32.5	0.178	53.0	0.331	73.5	0.080
-7.5	0.888	3.4	0.976	12.5	0.710	33.0	0.193	53.5	0.326	74.0	0.075
-7.0	0.902	3.6	0.973	13.0	0.689	33.5	0.207	54.0	0.321	74.5	0.071
-6.5	0.915	3.8	0.970	13.5	0.667	34.0	0.221	54.5	0.315	75.0	0.066
-6.0	0.927	4.0	0.967	14.0	0.645	34.5	0.234	55.0	0.310	75.5	0.062
-5.5	0.939	4.2	0.964	14.5	0.622	35.0	0.247	55.5	0.304	76.0	0.058
-5.0	0.949	4.4	0.960	15.0	0.599	35.5	0.259	56.0	0.298	76.5	0.054
-4.5	0.959	4.6	0.957	15.5	0.575	36.0	0.270	56.5	0.292	77.0	0.050
-4.0	0.967	4.8	0.953	16.0	0.551	36.5	0.281	57.0	0.286	77.5	0.046
-3.5	0.975	5.0	0.949	16.5	0.527	37.0	0.291	57.5	0.279	78.0	0.042
-3.0	0.981	5.2	0.945	17.0	0.503	37.5	0.300	58.0	0.273	78.5	0.039
-2.8	0.984	5.4	0.941	17.5	0.479	38.0	0.309	58.5	0.266	79.0	0.036
-2.6	0.986	5.6	0.936	18.0	0.454	38.5	0.317	59.0	0.260	79.5	0.033
-2.4	0.988	5.8	0.932	18.5	0.429	39.0	0.325	59.5	0.253	80.0	0.029
-2.2	0.990	6.0	0.927	19.0	0.404	39.5	0.332	60.0	0.247	80.5	0.027
-2.0	0.992	6.2	0.922	19.5	0.379	40.0	0.338	60.5	0.240	81.0	0.024
-1.8	0.993	6.4	0.917	20.0	0.355	40.5	0.344	61.0	0.233	81.5	0.021
-1.6	0.995	6.6	0.912	20.5	0.330	41.0	0.349	61.5	0,226	82.0	0.019
-1.4	0.996	6.8	0.907	21.0	0.305	41.5	0.353	62.0	0,220	82.5	0.017
-1.2	0.997	7.0	0.902	21.5	0.280	42.0	0.357	62.5	0.213	83.0	0.014
-1.0	0.998	7.2	0.896	22.0	0.256	42.5	0.361	63.0	0.206	83.5	0.012
-0.8	0.999	7.4	0.890	22.5	0.232	43.0	0.364	63.5	0.199	84.0	0.011
-0.6	0.999	7.6	0.885	23.0	0.207	43.5	0.366	64.0	0.193	84.5	0.009
-0.4	1.000	7.8	0.879	23.5	0.183	44.0	0.368	64.5	0.185	85.0	0.007
-0.2	1.000	8.0	0.873	24.0	0.160	44.5	0.370	65.0	0.178	85.5	0.006
0.0	1.000	8.2	0.867	24.5	0.136	45.0	0.371	65.5	0.172	86.0	0.005
0.2	1.000	8.4	0.860	25.0	0.113	45.5	0.371	66.0	0.165	86.5	0.004
0.4	1.000	8.6	0.854	25.5	0.091	46.0	0.371	66.5	0.159	87.0	0.003
0.6	0.999	8.8	0.847	26.0	0.068	46.5	0.370	67.0	0.153	87.5	0.002
8.0	0.999	9.0	0.841	26.5	0.047	47.0	0.370	67.5	0.146	88.0	0.001
1.0	0.998	9.2	0.834	27.0	0.025	47.5	0.368	68.0	0.140	88.5	0.001
1.2	0.997	9.4	0.827	27.5	0.004	48.0	0.367	68.5	0.134	89.0	0.000
1.4	0.996	9.6	0.820	28.0	0.017	48.5	0.364	69.0	0.128	89.5	0.000
1.6	0.995	9.8	0.816	28.5	0.037	49.0	0.362	69.5	0.123	90.0	0.000
1.8	0.993	10.0	0.809	29.0	0.056	49.5	0.359	70.0	0.117		_
2.0	0.992	10.2	0.802	29.5	0.075	50.0	0.356	70.5	0.111		
2.2	0.990	10.4	0.794	30.0	0.094	50.5	0.353	71.0	0.106		





-2

Degrees Below Horizontal

Date

Call Letters
Location

WBRZ-DT

Channel

Baton Rouge, LA

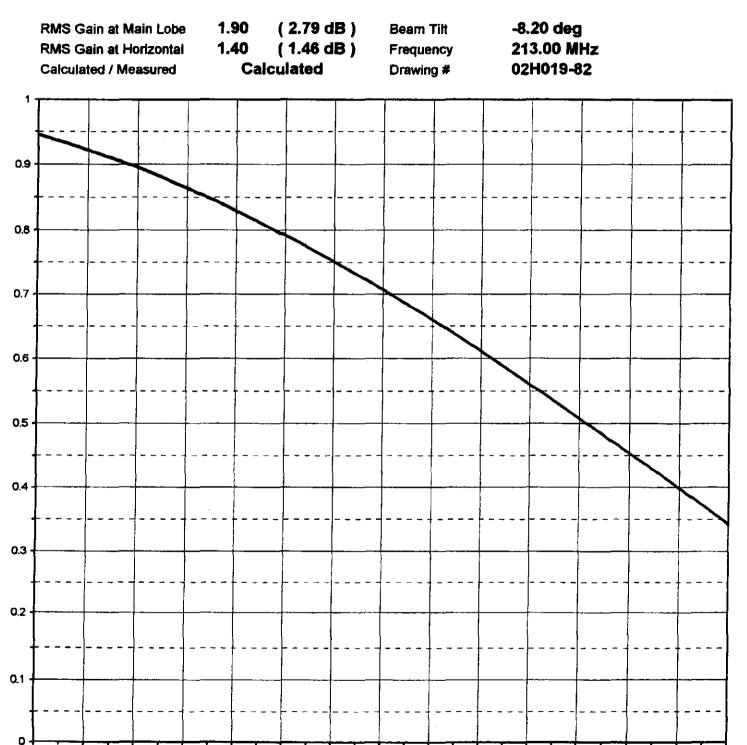
13

Customer

Antenna Type

THP-SP3-2-1

# ELEVATION PATTERN: 30, 150, & 270° Azimuths



3

6

7

8

10

11



Date

**WBRZ-DT** 

Sheet 7 of 11 Channel 13

Figure 1

Baton Rouge, LA

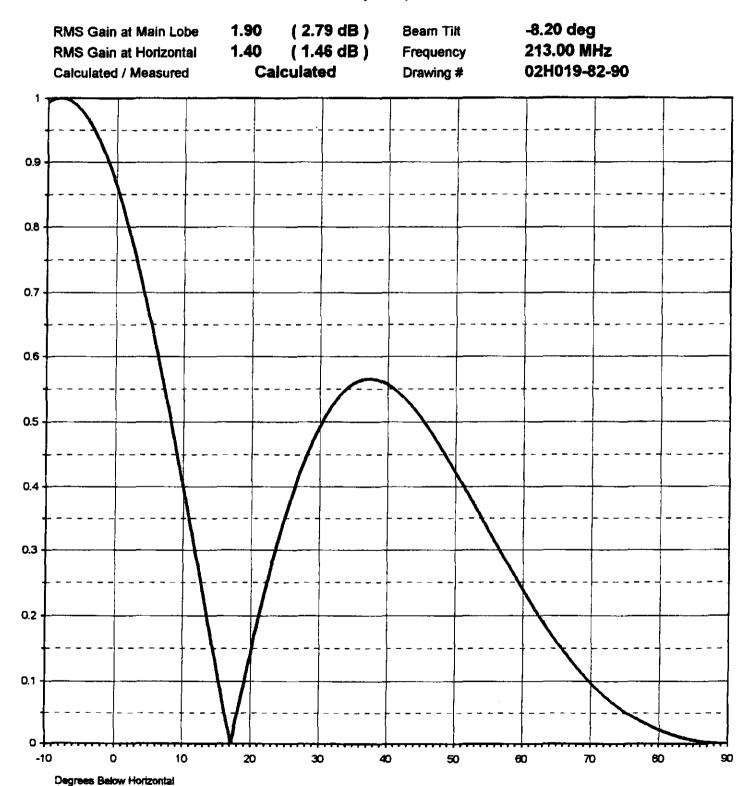
Location Customer

Call Letters

Antenna Type

THP-SP3-2-1

# ELEVATION PATTERN: 30, 150, & 270° Azimuths



13



Date

**Call Letters** 

WBRZ-DT Channel

Location Baton Rouge, LA

Customer

Antenna Type

THP-SP3-2-1

# **TABULATION OF ELEVATION PATTERN**

Elevation Pattern Drawing #: 02H019-82-90

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	_ Field	Angle	Field
-10.0	0.993	2.4	0.776	10.6	0.371	30.5	0.501	51.0	0.406	71.5	0.082
-9.5	0.996	2.6	0.767	10.8	0.359	31.0	0.511	51.5	0.397	72.0	0.077
-9.0	0.999	2.8	0.759	11.0	0.348	31.5	0.519	52.0	0.388	72.5	0.073
-8.5	1.000	3.0	0.751	11.5	0.320	32.0	0.527	52.5	0.378	73.0	0.068
-8.0	1.000	3.2	0.742	12.0	0.292	32.5	0.534	53.0	0.369	73.5	0.064
-7.5	0.999	3.4	0.733	12.5	0.263	33.0	0.540	53.5	0.360	74.0	0.060
-7.0	0.997	3.6	0.725	13.0	0.235	33.5	0.545	54.0	0.350	74.5	0.056
-6.5	0.994	3.8	0.716	13.5	0.207	34.0	0.550	54.5	0.341	75.0	0.052
-6.0	0.990	4.0	0.707	14.0	0.179	34.5	0.554	55.0	0.331	75.5	0.048
-5.5	0.985	4.2	0.698	14.5	0.151	35.0	0.558	55.5	0.322	76.0	0.045
-5.0	0.979	4.4	0.688	15.0	0.123	35.5	0.560	56.0	0.312	76.5	0.041
-4.5	0.972	4.6	0.679	15.5	0.095	36.0	0,562	56.5	0.303	77.0	0.038
-4.0	0.964	4.8	0.670	16.0	0.068	36.5	0.564	57.0	0.294	77.5	0.035
-3.5	0.955	5.0	0.660	16.5	0.040	37.0	0.565	57.5	0.285	78.0	0.032
-3.0	0.945	5.2	0.651	17.0	0.014	37.5	0,565	58.0	0.276	78.5	0.030
-2.8	0.941	5.4	0.641	17.5	0.013	38.0	0.564	58.5	0.267	79.0	0.027
-2.6	0.936	5.6	0.631	18.0	0.039	38.5	0.563	59.0	0.258	79.5	0.024
-2.4	0.932	5.8	0.621	18.5	0.065	39.0	0.562	59.5	0.249	80.0	0.022
-2.2	0.927	6.0	0.611	19.0	0.090	39.5	0.560	60.0	0.240	80.5	0.020
-2.0	0.922	6.2	0.601	19.5	0.115	40.0	0.557	60.5	0.232	81.0	0.018
-1.8	0.917	6.4	0.591	20.0	0.139	40.5	0.554	61.0	0.223	81.5	0.016
-1.6	0.911	6.6	0.581	20.5	0.163	41.0	0,550	61.5	0.215	82.0	0.014
-1.4	0.906	6.8	0.571	21.0	0.186	41.5	0.546	62.0	0.207	82.5	0.012
-1.2	0.900	7.0	0.560	21.5	0.209	42.0	0.542	62.5	0.199	83.0	0.011
-1.0	0.895	7.2	0.550	22.0	0.231	42.5	0.537	63.0	0.191	83.5	0.009
-0.8	0.889	7.4	0.540	22.5	0,253	43.0	0.531	63.5	0.183	84.0	0.008
-0.6	0.883	7.6	0.529	23.0	0.274	43.5	0.526	64.0	0.176	84.5	0.006
-0.4	0.877	7.8	0.518	23.5	0.294	44.0	0.519	64.5	0.167	85.0	0.005
-0.2	0.870	8.0	0.508	24.0	0.313	44.5	0.513	65.0	0.160	85.5	0.004
0.0	0.864	8.2	0.497	24.5	0.332	45.0	0.506	65.5	0.153	86.0	0.003
0.2	0.857	8.4	0.486	25.0	0.350	45.5	0.499	66.0	0.146	86.5	0.003
0.4	0.850	8.6	0.475	25.5	0.368	46.0	0.492	66.5	0.139	87.0	0.002
0.6	0.844	8.8	0.465	26.0	0.385	46.5	0.484	67.0	0.133	87.5	0.001
8.0	0.837	9.0	0.454	26.5	0.401	47.0	0.476	67.5	0.126	88.0	0.001
1.0	0.829	9.2	0.443	27.0	0.416	47.5	0.468	68.0	0.120	88.5	0.000
1.2	0.822	9.4	0.432	27.5	0.430	48.0	0.460	68.5	0.114	89.0	0.000
1.4	0.815	9.6	0.421	28.0	0.444	48.5	0.451	69.0	0.108	89.5	0.000
1.6	0.807	9.8	0.415	28.5	0.457	49.0	0.443	69.5	0.103	90.0	0.000
1.8	0.799	10.0	0.404	29.0	0.469	49.5	0.434	70.0	0.097		
2.0	0.792	10.2	0.393	29.5	0:481	50.0	0.425	70.5	0.092		
2.2	0.784	10.4	0.382	30.0	0.491	50.5	0.416	71.0	0.087		



Date

Figure 1 Sheet 9 of 11

**WBRZ-DT** Call Letters

Channel

13

Location Customer

Antenna Type

**THP-SP3-2-1** 

Baton Rouge, LA

**ELEVATION PATTERN: 90, 210, & 330° Azimuths** 

RMS Gain at Main Lobe **RMS Gain at Horizontal** 

1.90 1.40

(2.79 dB) (1.46 dB)

Beam Tilt Frequency 8.20 deg 213.00 MHz

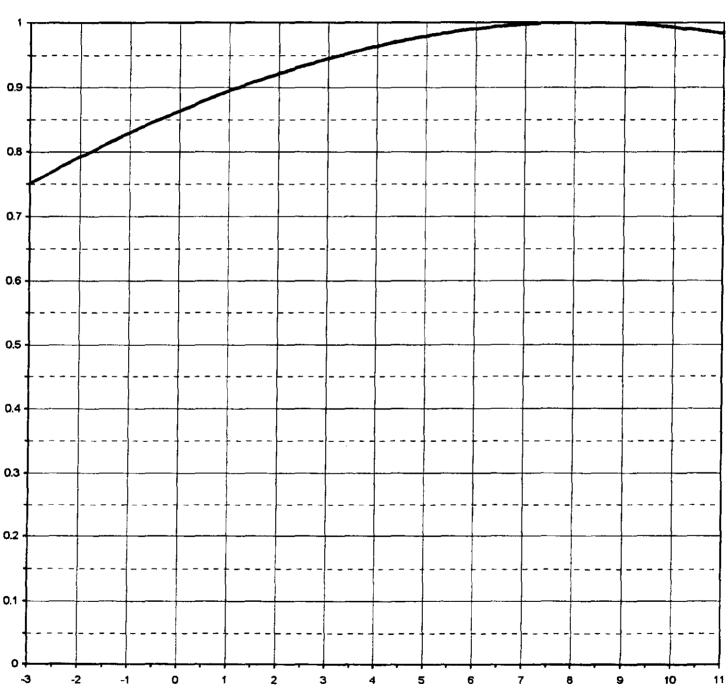
Calculated / Measured

Degrees Below Horizontal

Calculated

Drawing #

02H019820





Degrees Below Horizontal

Date

Call Letters

WBRZ-DT

Channel 13

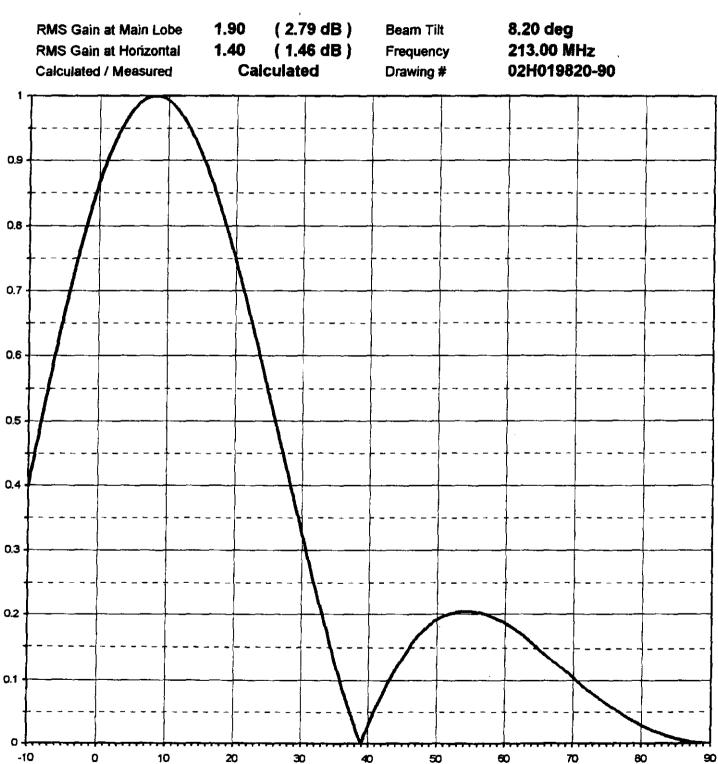
Location Customer

Antenna Type

THP-SP3-2-1

Baton Rouge, LA

# **ELEVATION PATTERN: 90, 210, & 330° Azimuths**



13



Date

Call Letters Location WBRZ-DT Channel

--- | A

e1

Baton Rouge, LA

Customer

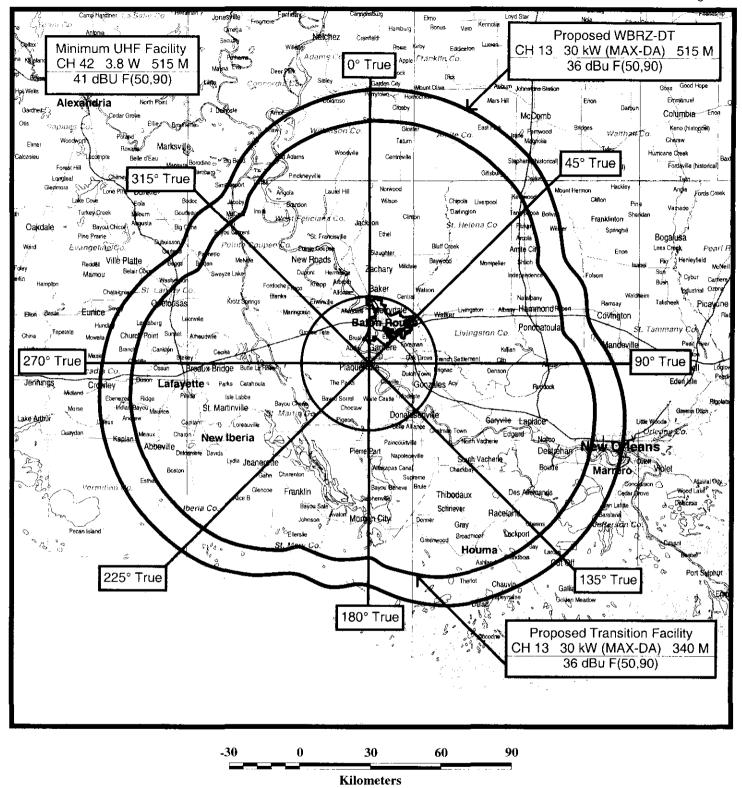
Antenna Type

THP-SP3-2-1

# **TABULATION OF ELEVATION PATTERN**

Elevation Pattern Drawing #: 02H019820-90

Angle	Field										
-10.0	0.398	2.4	0.932	10.6	0.989	30.5	0.308	51.0	0.196	71.5	0.091
-9.5	0.426	2.6	0.936	10.8	0.987	31.0	0.287	51.5	0.198	72.0	0.087
-9.0	0.454	2.8	0.941	11.0	0.985	31.5	0.267	52.0	0.200	72.5	0.083
-8.5	0.481	3.0	0.945	11.5	0.979	32.0	0.246	52.5	0.202	73.0	0.079
-8.0	0.508	3.2	0.949	12.0	0.972	32.5	0.226	53.0	0.203	73.5	0.075
-7.5	0.534	3.4	0.953	12.5	0.964	33.0	0.206	53.5	0.204	74.0	0.070
-7.0	0.560	3.6	0.957	13.0	0.955	33.5	0.187	54.0	0.204	74.5	0.066
-6.5	0,586	3.8	0.961	13.5	0.946	34.0	0.168	54.5	0.204	75.0	0.063
-6.0	0.611	4.0	0.964	14.0	0.935	34.5	0.149	55.0	0.204	75.5	0.059
-5.5	0.636	4.2	0.968	14.5	0.924	35.0	0.131	55.5	0.203	76.0	0.055
-5.0	0.660	4.4	0.971	15.0	0.912	35.5	0.113	56.0	0.202	76.5	0.051
-4.5	0.684	4.6	0.974	15.5	0.899	36.0	0.096	56.5	0.201	77.0	0.048
-4.0	0.707	4.8	0.977	16.0	0.885	36.5	0.079	57.0	0.200	77.5	0.044
-3.5	0.729	5.0	0.979	16.5	0.871	37.0	0.062	57.5	0.198	78.0	0.041
-3.0	0.751	5.2	0.982	17.0	0.855	37.5	0.046	58.0	0.196	78.5	0.038
-2.8	0.759	5.4	0.984	17.5	0.840	38.0	0.031	58.5	0.194	79.0	0.035
-2.6	0.787	5.6	0.987	18.0	0.823	38.5	0.016	59.0	0.191	79.5	0.032
-2.4	0.776	5.8	0.989	18.5	0.806	39.0	0.001	59.5	0.189	80.0	0.029
-2.2	0.784	6.0	0.990	19.0	0.789	39.5	0.013	60.0	0.186	80.5	0.026
-2.0	0.792	6.2	0.992	19.5	0.771	40.0	0.027	60.5	0.183	81.0	0.024
-1.8	0.799	6.4	0.994	20.0	0.752	40.5	0.040	61.0	0.180	81.5	0.021
-1.6	0.807	6.6	0.995	20.5	0.733	41.0	0.052	61.5	0.176	82.0	0.019
-1.4	0.815	6.8	0.996	21.0	0.713	41.5	0.064	82.0	0.173	82.5	0.016
-1.2	0.822	7.0	0.997	21.5	0.694	42.0	0.076	62.5	0.169	83.0	0.014
-1.0	0.829	7.2	0.998	22.0	0.673	42.5	0.087	63.0	0.165	83.5	0.012
-0.8	0.837	7.4	0.999	22.5	0.653	43.0	0.097	63.5	0.161	84.0	0.011
-0.6	0.844	7.6	0.999	23.0	0.632	43.5	0.107	64.0	0.157	84.5	0.009
-0.4	0.850	7.8	1.000	23.5	0.611	44.0	0.117	64.5	0.152	85.0	0.007
-0.2	0.857	8.0	1.000	24.0	0.590	44.5	0.126	65.0	0.148	85.5	0.006
0.0	0.864	8.2	1.000	24.5	0.568	45.0	0.134	65.5	0.144	86.0	0.005
0.2	0.870	8.4	1.000	25.0	0.546	45.5	0.142	66.0	0.140	86.5	0.004
0.4	0.877	8.6	1.000	25.5	0.525	46.0	0.149	66.5	0.135	87.0	0.003
0.6	0.883	8.8	0.999	26.0	0.503	46.5	0.156	67.0	0.131	87.5	0.002
0.8	0.889	9.0	0.999	26.5	0.481	47.0	0.162	67.5	0.127	88.0	0.001
1.0	0.895	9.2	0.998	27.0	0.459	47.5	0.168	68.0	0.122	88.5	0.001
1.2	0.900	9.4	0.997	27.5	0.437	48.0	0.173	68.5	0.118	89.0	0.000
1.4	0.906	9.6	0.996	28.0	0.415	48.5	0.178	69.0	0.113	89.5	0.000
1.6	0.911	9.8	0.995	28.5	0.394	49.0	0.183	69.5	0.109	90.0	0.000
1.8	0.917	10.0	0.994	29.0	0.372	49.5	0.187	70.0	0.104		-
2.0	0.922	10.2	0.992	29.5	0.351	50.0	0.190	70.5	0.100		
2.2	0.927	10.4	0.991	30.0	0.329	50.5	0.193	71.0	0.096		



### PREDICTED NOISE LIMITED CONTOURS

STATION WBRZ-DT BATON ROUGE, LOUISIANA CH 13 30 KW (MAX-DA) 515 M

du Treil, Lundin & Rackley, Inc. Sarasota, FL

#### DTV - TV Separation Study

Job Title :WBRZ-DT Separation Buffer 161 km Zone : 3 FCC TV DB Date : 07/30/99 Channel 13 (210-216 MHz) Coordinates : 30-17-49 91-11-40

Status	St FCC File No.	Zone	HAAT(m)	Latitude Bear. Dist. Longitude True (km)	(km)
	NEW ORLEANS	*12(0)	316 DA	29-57-14 107.4 125.87 89-56-58 0.87	11.0/125
WJTV LIC				32-14-26 19.0 228.26 90-24-15 103.26	
KBMT LIC	BEAUMONT TX BLCT-820802KF			30-11-26 268.1 259.30 93-53-08 134.30	
WLOXTV LIC	BILOXI MS BLCT-1455	13(+) III	316 408	30-43-25 76.2 207.35 89-05-29 -66.25	
LIC		II		32-11-45 338.7 226.44 92-04-10 -47.16	
	MONROE LA BPET-980925KH			32-11-50 338.7 226.62 92-04-14 -46.98	
KTRKTV LIC				29-34-27 260.1 422.75 95-29-37 149.15	

<sup>\*\*</sup> End of TV Separation Study for Channel 13 \*\*

Using the procedures outlined in the FCC's OET-69 Bulletin, the proposed WBRZ-DT operation complies with the FCC's 2%/10% interference standards (See Technical Narrative).

#### DTV - DTV Separation Study

Job Title :WBRZ-DT Separation Buffer 161 km Zone : 3 FCC DTV DB Date: 12/18/98

Channel 13 (210-216 MHz) Coordinates: 30-17-49 91-11-40

No DTV records located on this channel & within the required separation plus a safety factor.